

Sub P (1.7)
1. A drive-section-isolated FOUP opener for opening and closing a FOUP door which closes a front opening [portion] of a FOUP containing a plurality of semiconductor wafers oriented horizontally and vertically arranged [in layers] at predetermined intervals, said FOUP opener comprising:

A
a dock plate for carrying and positioning a [said] FOUP;

a dock moving mechanism for moving said dock plate to a position for detachment and attachment of the [said] FOUP door;

a port door including a detachment/attachment mechanism for detaching and attaching the [said] FOUP door and a holder mechanism for holding the [said] FOUP door;

a port plate having [including] an opening [portion], the opening of said port plate [portion] being closed by said port door, said port plate having a clean room side and a FOUP side;

a port door horizontal-movement mechanism for horizontally moving said port door;

a sensor horizontal-movement mechanism for horizontally moving a sensor bracket, independently of said port door, between a horizontally extended position within the FOUP and a horizontally retracted position withdrawn from the FOUP, said sensor bracket having a mapping sensor mounted on an upper portion of said sensor bracket and adapted to detect

presence/absence, storage condition, and position of wafers contained in the [said] FOUP; [and]

a port-door-and-sensor vertical-movement mechanism for vertically moving said port door and said sensor bracket with said port door holding the [said] FOUP door[, so as to house said FOUP door]; and

a drive for [section of] said port door horizontal-movement mechanism, a drive

for [section of] said sensor horizontal-movement mechanism, and a drive for [section of] said port-door-and-sensor vertical-movement mechanism being disposed on the FOUP side of [in opposition to a clean room with respect to] said port plate[, said clean room housing said port door and said sensor bracket].

2. (Amended) A drive-section-isolated FOUP opener according to Claim 1, wherein said port plate has a vertically elongated guide slit located underneath the opening: [portion in a downwardly extending condition] and

wherein the drive for [section of] said port door horizontal-movement mechanism, the drive for [section of] said sensor horizontal-movement mechanism, and the drive for [section of] said port-door-and-sensor vertical-movement mechanism move said port door and said sensor bracket horizontally and [or] vertically, via said guide slit.

4. (Amended) A drive-section-isolated FOUP opener according to Claim 1, further comprising a drive section chamber [for] housing the drive for [section of] said port door horizontal-movement mechanism, the drive for [section of] said sensor horizontal-movement mechanism, and the drive for [section of] said port-door-and-sensor vertical-movement mechanism, and

said drive section chamber including a device for exhausting [an] atmosphere from [in] said drive section chamber to an exterior area [of said drive section chamber].

5. (Amended) A drive-section-isolated FOUP opener according to Claim 2, further comprising a drive section chamber [for] housing the drive for [section of] said port door horizontal-movement

mechanism, the drive for [section of] said sensor horizontal-movement mechanism, and the drive for [section of] said port-door-and-sensor vertical-movement mechanism, and

said drive section chamber including a device for exhausting [an] atmosphere from [in] said drive section chamber to an exterior area [of said drive section chamber].

6. (Amended) A drive-section-isolated FOUP opener according to Claim 3, further comprising a drive section chamber [for] housing the drive for [section of] said port door horizontal-movement mechanism, the drive for [section of] said sensor horizontal-movement mechanism, and the drive for [section of] said port-door-and-sensor vertical-movement mechanism, and

said drive section chamber including a device for exhausting [an] atmosphere from [in] said drive section chamber to an exterior area [of said drive section chamber].

REMARKS

The "Substitute Specification and Abstract" submitted herewith is intended to place the application in somewhat better English form in accordance with our practice. The "Substitute Specification and Abstract" contains no new matter. In order that the examiner can satisfy herself in this regard, also submitted herewith is a marked-up copy of the original specification and abstract, from which the "Substitute Specification and Abstract" was typed.

The rejection of claims 1-3 for anticipation by Bacchi et al is respectfully traversed on the basis of the present amendments to the claims. Insofar as the examiner was able to read